



### Distance Learning Delivery Modalities and Problems of the Technology and Livelihood Education Teachers

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#### Abstract:

This study determined the distance learning delivery modalities and what were the problems of the Technology and Livelihood Education (TLE) teachers in Barcelona District, Barcelona Sorsogon. The research utilized descriptive-survey method that determined the distance learning delivery modalities used by the TLE teachers. This also described the gathered data through an unstructured interview to determine what were the problems encountered along access to technology, Information and Communications Technology teaching integration, instructional materials, and administrative support.

The research employed researcher-devised survey questionnaire as the main instrument used in data gathering. The respondents of the study were sixty-three (63) teachers in Barcelona District specifically teaching TLE particularly in the intermediate levelgrades 4, 5, & 6 where TLE subject are being taught. The responses obtained were statistically treated with appropriate statistical tools and measures using frequency counts, and ranking. Furthermore, the data were evaluated, and interpreted that arrived at valid conclusions.

# Keywords: Distance Learning Delivery Modalities, Technology and Livelihood Education, Modular Distance Learning, Online Distance Learning, Tv-Based Learning, Radio-Based Instruction

### Introduction

To gain a thorough understanding of the study's premise, concepts from different literatures and studies were taken as source of details and facts. This basically contributed to the significance of the study.

The Covid-19 pandemic brought drastic change in the education system across the globe. However, the Department of Education was persistent to continue education. In lined with the commitment of the department to find ways to provide learning opportunities to all Filipino learners and in the delivery of quality, accessible, relevant, and integrated system of education, DepEd Order No.018, s. 2020 was issued. Supervened with a Policy Guidelines for the Provision of Learning Resources in the Implementation of the Basic Education Learning Continuity Plan (BE-LCP). This is the Department of Education's response in protecting the health and safety and well-being of learners, teachers, and personnel. The goal is to ensure that learning opportunities are provided to learners in a benign manner, through different distance learning delivery modalities. This also aimed to provide quality distance learning.

In relation, The Covid-19 pandemic generated concern and created a new set of issues, particularly for teachers of skill-based subjects such as TLE, which requires both skills and knowledge. As a result, even without face-to-face teacher-learning interaction, teachers struggled to find the easiest way to give the desired abilities for this learning area, because teachers are expected to be not only informed about the material but also skilled. However, in these hard times, there appears to be a significant gap between theory and practice.

Several studies related to the present study were reviewed. These provided the researcher with helpful information regarding the structure of ideas in this study.

Gregorio (2016), in her study, accentuated that the problems encountered by the Technology and Livelihood Education teachers in selected general secondary schools in Catanduanes were lack of teaching strategies, lack of capital investment, lack of teachers, unrepaired equipment, an inadequate number of facilities in teaching Technology and Livelihood Education. The implication of this research was those policymakers may consider allocating an ample budget intended for the implementation of Technology and Livelihood Education subjects since the students deserved to learn at best varied ways possible.

#### **Objectives**

#### Statement of the Problem

This study determined the distance learning delivery modalities and problems of the Technology and Livelihood Education

teachers in Barcelona District Division of Sorsogon for the school year 2021-2022. Specifically, it sought answer to the following questions:

- 1. What is the distance learning delivery modalities used by the teachers in teaching Technology and Livelihood Education?
- 2. What are the problems encountered by the Technology and Livelihood Education teachers in the distance learning delivery modalities along?
  - a. Access to Technology
  - b. Information and Communications Technology Teaching Integration
  - c. Instructional Materials
  - d. Administrative Support
- 3. What are the problems encountered by the Technology and Livelihood Education teachers when grouped according to distance learning delivery modalities?
- 4. What action plan could be proposed based on the results of the study?

#### Methodology

The research utilized descriptive-survey method. This was descriptive because this determined the distance learning delivery modalities utilized and described the problems that the TLE teachers encountered along access to technology, Information and Communications Technology teaching integration, instructional materials, and administrative support and the problems encountered when group according to distance learning delivery modalities.

Survey research, on the other hand, focuses on the facts and features of the situation or subject at hand. Significantly, it was concerned with experience of the TLE teachers as well as the current state of connections, behaviors, attitudes, processes, and impacts, as well as emerging trends in the education's current situation. A teacher-made survey questionnaire was utilized in gathering the needed data. The data were statistically treated, evaluated, and interpreted to arrive at valid conclusions.

The respondents of the study were the purposively-selected teachers teaching TLE in Barcelona District Division of Sorsogon, school year 2021-2022 respectively.

The sample was selected by means of frequency count to determine the number of teachers utilizing the distance learning delivery modalities considering the travel and health restrictions due to Covid-19 pandemic.

The instrument used by the researcher in data gathering was the teacher-made survey questionnaire which consisted of two parts. The first part was designed to determine the distance learning delivery modalities utilized by the TLE teachers. The second part designed to find out what problems were encountered by the TLE teachers in the distance learning delivery modalities along access to technology, Information and Communications Technology teaching integration, instructional materials, and administrative support. The gathered data shall be presented conceptually.

To ensure that the instrument, will rationally find out what this intended to determine. This was subjected to editing and checking by at least three experts in the field of research instrument preparation. Then, the researcher's panelists thoroughly evaluated the instrument's contents' comprehensiveness and made revisions as to the format and contents of the instrument. This action, prior to questionnaire distribution was termed as content validity. Moreover, to further validate the data from the survey an unstructured interview was made observing health protocols. In the unstructured interview the researcher used note pad and a recorder not to miss any responses of the respondents.

The collected data were tabulated, analyzed, and interpreted with the use of appropriate statistical techniques. To determine the distance learning delivery modalities used by Technology and Livelihood Education teachers and what were the problems encountered in the utilized distance learning delivery modalities along Access to Technology, Information and Communications Technology teaching integration, instructional materials, administrative support, frequency counts and ranking were used.

### **Result and Discussion**

#### Based from the data gathered, the following findings are revealed:

- 1. In the Distance Learning Delivery Modalities used by the TLE teachers of Barcelona District, it found out that the Modular Distance Learning (MDL) was the topmost modality utilized by the teachers above all other types of distance learning delivery modalities, followed by Radio-based instruction, TV-based learning, and online learning.
- 2. The problems encountered by the TLE teachers was the high cost of devices ranked 1 along access to technology. This was followed by the absence of internet/mobile data connection, the high maintenance cost of devices and equipment. Along Information and Communications Technology teaching integration, TLE teachers limited knowledge in simple ICT troubleshooting, and lack of training on ICT ranked 1 and 2 respectively. While, TLE teachers' problems along instructional materials, the lack of devices intended for multiple instructions ranked 1. This was followed by differentiated instructional materials are tedious to prepare. Along administrative support, the lack of effective communication between teachers and school heads, followed by insufficient technical support ranked 1 and 2 respectively.
- 3. The problems encountered by the TLE teachers along access to technology when grouped according to distance learning delivery modalities, were the high cost of devices ranked 1, and the high maintenance cost of the devices and equipment

ranked 2. Findings revealed that limited knowledge in simple ICT troubleshooting was the problem encountered by TLE teachers when grouped according to distance learning delivery modalities along ICT teaching integration ranked 1. Followed by insufficient knowledge in the use of online learning platforms ranked 2, and lack of training on ICT ranked 3. As regards to problems of TLE teachers along instructional materials when grouped according to distance learning delivery modalities, were the lack of devices intended for multiple instructions, differentiated instructional materials are tedious to prepare, and high maintenance cost of online application software ranked 1, 2, and 3 respectively. Relative to problems encountered along administrative support when grouped according to distance learning delivery modalities, the principal problem encountered by all teachers was the lack of effective communication between teachers and school heads ranked 1 and insufficient technical support ranked 2.

4. A plan of action be made to address the problems encountered by the TLE teachers along access to technology, Information and Communications teaching integration, instructional materials, and administrative support.

#### Based from the findings, the following were drawn:

#### Conclusions

- 1. The distance learning delivery modality most utilized by the TLE teachers of the Barcelona District was the modular distance learning. Followed by radio-based instruction TV-based learning, and online learning.
- 2. The Technology and Livelihood Education (TLE) teachers encountered problems along access to technology in terms of high cost of devices, absence of internet/mobile data connection, high maintenance cost of devices and equipment in the utilized distance learning delivery modalities. Along Information and Communications Technology teaching integration, TLE teachers encountered problems as to limited knowledge in simple ICT troubleshooting and lack of ICT trainings. TLE teachers encountered problems along instructional materials with regards to the lack of devices intended for multiple instructions. Additional devices to be utilized for multiple instructions were needed and preparation of the instructional materials for differentiated instruction was tedious to prepare were the identified problems. In relation to administrative support, teachers have experienced problems concerning effective communication between them and their school heads. Likewise, insufficient technical support in utilizing the distance learning delivery modalities.
- 3. The topmost problems encountered by the TLE teachers along access to technology when grouped according to distance learning delivery modalities were the high cost of devices and the high maintenance cost of the devices and equipment. The most critical problem met by TLE teachers along ICT teaching integration using the four distance learning delivery modalities was the teachers' limited knowledge in simple ICT troubleshooting together with insufficient knowledge in the use of online learning platforms, and lack of training on ICT. With regards to instructional materials when grouped according to distance learning delivery modalities teachers wanted additional devices to be utilized for multiple instructions. Additionally, teachers experienced additional demand in preparing the instructional materials for differentiated instruction as well as high maintenance cost of online application software. The prime problems met by the teachers with regards to administrative support when grouped according to distance learning delivery modalities teachers and school heads and insufficient technical support.
- 4. A plan of action be made to address the problems encountered by the TLE teachers along access to technology, Information and Communications teaching integration, instructional materials, and administrative support.

#### **Recommendations:**

- 1. The teachers may also explore the use of ODL and other distance learning delivery modalities to consider varying needs of the students.
- 2. Provision of Information and Communications Technology devices and equipment through the allocation of funds from a portion of the school MOOE, and donations from other stakeholders. Conduct In-Service Training (INSET) for teachers along Information and Communications Technology. Inclusion of professional development along Information and Communication Technology Teaching Integration. Incorporation of the development of instructional materials with differentiated instructions and developmentally appropriate in School Learning Action Cell (SLAC) and INSET to provide ample time in the preparation and development. School leaders may conduct timely School Monitoring, Evaluation and Adjustment (SMEA), and regular meetings. To enhance school communication to teachers together with the stakeholders.
- 3. Provide Income Generating Projects (IGPs), tap donors through community linkages, and school may allocate budget for Information and Communications Technology related devices and equipment as well as for the devices and equipment, and online software maintenance. Engage or enroll in technical courses involving ICT trouble shooting be it simple or advanced, and workshops regard with online learning platforms. Regular conduct of SLAC sessions involving ICT integration and development of skills in crafting differentiated instructional materials. School leaders may conduct regular staff meeting involving the identification and realization of school issues and concerns that may develop open effective communication.
- 4. The proposed action plan may be given due consideration by every school head for the teachers and be implemented to address the problems encountered in the utilized distance learning delivery modalities and;

5. Further researches related to the present study be conducted to verify and enhance the present research.

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